E-1000x Fuel Cell System

Features

- Robust, reliable power
- Optimized PEM technology for high duty cycle, grid-support applications
- Parallel, modular chassis design, N+1 capable
- Multiple bus / Multiple voltage site solutions
- Indoor shelter 19" rack mount and outdoor cabinetized configurations

The E-1000x™ hydrogen fuel cell is designed for grid-support and high duty cycle customer applications. It offers robust reliability and comes with an industry-leading warranty, providing extended runtime for critical equipment. The E-1000x™ fuel cell system produces DC power for equipment needing up to 1,000 Watts in a compact 4U rack-mount chassis. Multiple systems may be combined for higher power applications and N+1 redundancy. Because the only emissions are warm air and a small amount of water, the E-1000x™ is exempt from the most stringent air quality standards and is a valuable asset for use in CO2 reduction efforts.

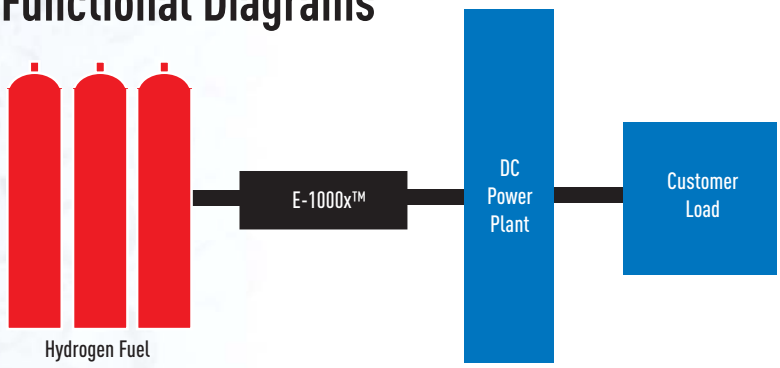
ReliOn®

Fuel Cells

Simply Powerful

Specifications

Functional Diagrams



- Rack and cabinet options enable higher capacity requirements
- Compact chassis allow integration with batteries and DC to DC conversion equipment

The E-1000x™ fuel cell system is well-suited for a variety of applications:

3G and 4G wireless
Wireless backhaul/T1/Fiber/Microwave
Fiber fed DAS
Remote radio head units
SCADA
Disaster response / First Responder
Transportation (Signals / Signs)
Microwave communications
Radio/Repeater sites
Flight guidance ILS
Surveillance / Security systems
Broadband DLC
P25 / Tetra
Off-grid hybrid primary power

Product Specifications

Physical	Dimensions (w x d x h)	17.25" x 24" x 7" / 43.8 cm x 61 cm x 18 cm
	Weight	58 lbs / 26.4 kg
	Mounting	19" or 23" rack mount (4U)
Performance	Maximum power	1,000W in single chassis / Scalable in rack or cabinet
	Rated current	0 to 42A @ 24V / 0 to 21A @ 48V
	DC voltage	24 / 48 V nominal
Fuel	Composition	Standard industrial grade hydrogen (99.95%)
	Supply pressure to unit	8 to 12 psig / 55.1 to 82.8 KPag / 0.55 to 0.83 bar
	Consumption	13.2 slpm @ 1,000W
	Hydrogen Storage Capacity	n/a (modular storage solutions available from 8kWh to 300kWh)
Operation	Ambient temperature	23ºF to 122ºF / -5ºC to 50ºC Optional -40ºC to 50ºC in hardened outdoor cabinet
	Relative humidity	0-95% non-condensing
	Altitude	-197 ft to 13,800 ft / -60m to 4,206m
	Location	Indoors or hardened outdoor cabinet
Safety	Compliance	CSA (others pending)
Emissions	Water	Max 25mL / kWh (primarily vapor)
	Noise	Max 65 dBA @ 4.9 ft / 1.5m when ducted outside
Monitoring / Control	Remote	System configuration & status / Historical & operational data
	Communications	Standard: USB / Dry contact / Front panel display / Ethernet / SNMP / Web interface Optional: Wireless modem - CDMA / GSM / Ethernet switch

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